



ANALYTICAL REPORT

Report Date: February 02, 2017

Jeff Wright
Weston Solutions, Inc.
13702 Coursey Blvd.
Baton Rouge, LA 70817

Phone: (225) 297-5415

E-mail: jeff.wright@westonsolutions.com

Workorder: **34-1703278**

Client Project ID: PH3-BR1-28012017-81 012817

Purchase Order: 6-013017-075134-0001

Project Manager: Paul Pope

Analytical Results

Sample ID: PH3-BR1-28012017-81			Collected: 01/28/2017	
Lab ID: 1703278001		Sampling Location: Bedroom 1		Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
		Sampling Parameter: Air Volume 240 L		Analyzed: 02/01/2017
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	6.3	0.026	0.019	5.5

Sample ID: PH3-BR2-28012017-81			Collected: 01/28/2017	
Lab ID: 1703278002		Sampling Location: Bedroom 2		Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
Sampling Parameter: Air Volume 240 L			Analyzed: 02/01/2017	
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	6.4	0.027	0.019	5.5

Sample ID: PH3-BR3-28012017-81		Collected: 01/28/2017		
Lab ID: 1703278003		Sampling Location: Bedroom 3		Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
		Sampling Parameter: Air Volume 240 L		Analyzed: 02/01/2017
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	<5.5	<0.023	<0.016	5.5



9868534

ADDRESS 960 West LeVoy Drive, Salt Lake City, Utah, 84123 USA | PHONE +1 801 266 7700 | FAX +1 801 268 9992

ALS GROUP USA, CORP. An ALS Limited Company

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



ANALYTICAL REPORT

Workorder: **34-1703278**

Client Project ID: PH3-BR1-28012017-81 012817

Purchase Order: 6-013017-075134-0001

Project Manager: Paul Pope

Analytical Results

Sample ID: PH3-BTH1-28012017-81			Collected: 01/28/2017	
Lab ID: 1703278004		Sampling Location: Bathroom 1		Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
Sampling Parameter: Air Volume 240 L			Analyzed: 02/01/2017	
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	5.8	0.024	0.018	5.5

Sample ID: PH3-BTH1-28012017-82			Collected: 01/28/2017	
Lab ID: 1703278005		Sampling Location: Bathroom 1		Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
Sampling Parameter: Air Volume 240 L			Analyzed: 02/01/2017	
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	7.1	0.030	0.021	5.5

Sample ID: PH3-BTH2-28012017-81			Collected: 01/28/2017	
Lab ID: 1703278006		Sampling Location: Bathroom 2		Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
		Sampling Parameter: Air Volume 240 L		Analyzed: 02/01/2017
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	<5.5	<0.023	<0.016	5.5

Sample ID: PH3-FB-28012017-85				Collected: 01/28/2017
Lab ID: 1703278007				Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
Sampling Parameter: Air Volume Not Applicable				Analyzed: 02/01/2017
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	6.6	NA	NA	5.5



ANALYTICAL REPORT

Workorder: **34-1703278**

Client Project ID: PH3-BR1-28012017-81 012817

Purchase Order: 6-013017-075134-0001

Project Manager: Paul Pope

Analytical Results

Sample ID: PH3-HVAC-28012017-81			Collected: 01/28/2017	
Lab ID: 1703278008		Sampling Location: HVAC System		Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
		Sampling Parameter: Air Volume 240 L		Analyzed: 02/01/2017
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	7.9	0.033	0.024	5.5

Sample ID: PH3-KTCH-28012017-81			Collected: 01/28/2017	
Lab ID: 1703278009		Sampling Location: Kitchen		Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
Sampling Parameter: Air Volume 240 L			Analyzed: 02/01/2017	
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	5.7	0.024	0.017	5.5

Sample ID: PH3-LAUN-28012017-81			Collected: 01/28/2017	
Lab ID: 1703278010		Sampling Location: Laundry Room		Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
		Sampling Parameter: Air Volume 240 L		Analyzed: 02/01/2017
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	7.1	0.029	0.021	5.5

Sample ID: PH3-LR-28012017-81			Collected: 01/28/2017	
Lab ID: 1703278011		Sampling Location: Laundry Room		Received: 01/31/2017
Method: OSHA 1003 Mod.		Media: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)		Prepared: 01/31/2017
		Sampling Parameter: Air Volume 240 L		Analyzed: 02/01/2017
Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	5.6	0.024	0.017	5.5

Comments

Workorder: 1703278

The reported results for phosphine [PH3] are based upon analysis for elemental phosphorus that has been calculated by mathematical conversion of the elemental result using the molecular weight ratio and molar ratio of phosphorus to phosphine. The reported value presumes that all phosphorus present is in the form of phosphine.



ANALYTICAL REPORT

Workorder: **34-1703278**

Client Project ID: PH3-BR1-28012017-81 012817

Purchase Order: 6-013017-075134-0001

Project Manager: Paul Pope

Comments

Quality Control: OSHA 1003 Mod. - (HBN: 184732)

LMB 535775 was above the reporting limit for phosphorus (6.15 µg/sample) so the LCS 535776 and LCSD 535777 results have been media blank corrected for phosphorus with LMB 535775.

Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Method	Analyst	Peer Review
OSHA 1003 Mod.	/S/ Peter P. Steen 02/01/2017 12:38	/S/ Lauren Jones 02/02/2017 11:21

Laboratory Contact Information

ALS Environmental
960 W Levoy Drive
Salt Lake City, Utah 84123

Phone: (801) 266-7700
Email: alslt.lab@ALSGlobal.com
Web: www.alssl.com

General Lab Comments

The results provided in this report relate only to the items tested.
Samples were received in acceptable condition unless otherwise noted.
Samples have not been blank corrected unless otherwise noted.
This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Environmental	ANAB (DoD ELAP)	ADE-1420	http://www.anab.org/accredited-organizations/
	Utah (NELAC)	DATA1	http://health.utah.gov/lab/labimp/
	Nevada	UT00009	http://ndep.nv.gov/bsdwlabservice.htm
	Oklahoma	UT00009	http://www.deq.state.ok.us/CSDnew/
	Iowa	IA# 376	http://www.iowadnr.gov/InsideDNR/RegulatoryWater.aspx
	Texas (TNI)	T104704456-11-1	http://www.tceq.texas.gov/field/qa/lab_accred_certif.html
	Washington	C596-16	http://www.ecy.wa.gov/programs/eap/labs/index.html
	Kansas	E-10416	http://www.kdheks.gov/lipo/index.html
Industrial Hygiene	AIHA LAP LLC (ISO 17025 & IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.org
	Washington	C596-16	http://www.ecy.wa.gov/programs/eap/labs/index.html
Lead Testing:			
CPSC	ANAB (ISO 17025, CPSC)	ADE-1420	http://www.anab.org/accredited-organizations/
Soil, Dust, Paint ,Air	AIHA LAP LLC (ISO 17025 & IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.org
Dietary Supplements	ACLASS (ISO 17025)	ADE-1420	http://www.aiclasscorp.com



ANALYTICAL REPORT

Workorder: **34-1703278**

Client Project ID: PH3-BR1-28012017-81 012817

Purchase Order: 6-013017-075134-0001

Project Manager: Paul Pope

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity.

LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.

ND = Not Detected, Testing result not detected above the LOD or LOQ.

NA = Not Applicable.

** No result could be reported, see sample comments for details.

< This testing result is less than the numerical value.

() This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.